



**UNITED STATES DEPARTMENT OF COMMERCE
Patent and Trademark Office**

Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
09/210,771	12/14/98	KAWAI	M 102317

OLIFF & BERRIDGE
PO BOX 19928
ALEXANDRIA VA 22320

LMC1/0731

EXAMINER

KLIMOWICZ, W

ART UNIT

PAPER NUMBER

2754

DATE MAILED:

07/31/00

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.

09/210,771

Applicant(s)

KAWAI ET AL.

Examiner

William J. Klimowicz

Art Unit

2754

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claims ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d):
- a) ☐ All b) ☐ Some * c) ☐ None of the CERTIFIED copies of the priority documents have been:
1. ☐ received.
2. ☐ received in Application No. (Series Code / Serial Number) ____.
3. ☐ received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. & 119(e).

Attachment(s)

- 15) ☐ Notice of References Cited (PTO-892)
- 16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 17) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____.
- 18) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 19) ☐ Notice of Informal Patent Application (PTO-152)
- 20) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 15 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 15 recites that the “first electrode is *to be* formed on a magnetic head slider” (emphasis added). This language is not positively set forth and represents a condition which may never occur. Thus it is unclear whether or not the magnetic head slider of claim 15 actually has a first electrode positively formed thereon.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

Claims 1-3, 5-7 and 10-13 are rejected under 35 U.S.C. 102(e) as being anticipated by Scheidecker et al. (US 5,734,523).

Scheidecker et al. (US 5,734,523) discloses a magnetic head device and a method of manufacturing the same, including a head slider with an MR magnetic head element, a first

Art Unit: 2754

plurality of electrodes of the slider and a second plurality of electrodes of a supporter (e.g., see FIGS. 8 and 9), wherein the magnetic head slider is fixed to the slider supporter and the first electrode(s) of the slider are electrically connected to each other with an anisotropic conductive resin. (65, 66) (see also COL. 5, lines 42-45; COL. 5, lines 53-55; COL. 6, line 49; COL. 7, lines 46-48; and COL. 8, lines 14-16).

Additionally, the product by process limitation "applying pressure" as set forth in claim 13 (line 6) is directed to the product per se, no matter how actually made, *In re Hirao*, 190 USPQ 15 at 17 (footnote 3). See also *In re Brown*, 173 USPQ 685; *In re Luck*, 177 USPQ 523; *In re Fessman*, 180 USPQ 324; *In re Avery*, 186 USPQ 161; *In re Wertheim*, 191 USPQ 90 (209 USPQ 554 does not deal with this issue); *In re Marosi et al*, 218 USPQ 289; and particularly *In re Thorpe*, 227 USPQ 964, all of which make it clear that it is the patentability of the final structure of the product "gleaned" from the process limitations or steps, which must be determined in a "product by process" claim, and not the patentability of the process limitations. Moreover, an old or obvious product produced by a new method is not a patentable product, whether claimed in "product by process" claims or not. Note that the applicant has the burden of proof in such cases, as the above case law makes clear.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 4, 8 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Scheidecker et al. (US 5,734,523).

With regard to claims 4, 8 and 9, Scheidecker et al. (US 5,734,523) remains silent with respect to the positioning of the ground electrode as being at “the other end portion of the slider” (claim 4), or wherein the thermosetting resin disclosed by Scheidecker et al. (US 5,734,523) is “an acrylic resin” (as per claim 8), or wherein the conductive powder (65) of Scheidecker et al. (US 5,734,523) is made of silver (as per claim 9).

Official notice is taken that the positioning of ground pads on sliders at prescribed end locations and the use of thermosetting acrylic resins and the use of silver as the conductive material within adhesive resins are notoriously old and well known in the art.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to position the ground connections of Scheidecker et al. (US 5,734,523) at a particular end of the slider, or to provide the thermosetting resin of Scheidecker et al. (US 5,734,523) as being conventional acrylic or wherein the conductive particles (65) of the conductive adhesive as disclosed by Scheidecker et al. (US 5,734,523) being silver, as is conventional. The rationale is as follows: one of ordinary skill in the art would have been motivated to position the ground connections of Scheidecker et al. (US 5,734,523) at a particular end of the slider, or to provide the thermosetting resin of Scheidecker et al. (US 5,734,523) as being conventional acrylic or wherein the conductive particles (65) of the conductive adhesive as disclosed by Scheidecker et al. (US 5,734,523) being silver, as is conventional in order to provide for sufficiently wide grounding area (as even suggested by Scheidecker et al. (US 5,734,523), which won't interfere with the data signal connections, see COL. 8, lines 6-18. or to provide for an inexpensive, yet

Art Unit: 2754

readily heat curable adhesive which becomes solid and insoluble upon heating, as is known with acrylic, and to provide a highly conductive material as the conductive filler (65) of Scheidecker et al. (US 5,734,523). Given the teachings of Scheidecker et al. (US 5,734,523), the differences between claims 4, 8 and 9 are within the general knowledge of one having ordinary skill in the art and do not demonstrate a novel or unobvious modification.

Claims 14-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Scheidecker et al. (US 5,734,523) in view of Ainslie et al. (US 4,789,914).

See the description of Scheidecker et al. (US 5,734,523) in the preceding paragraph, *supra*.

As per claim 14, Scheidecker et al. (US 5,734,523) does not show an electrode of the slider on a surface other than a surface on which the magnetic head element resides.

Ainslie et al. (US 4,789,914), however, teaches providing an electrode on a slider that is on a surface other than the surface on which the magnetic head element is formed, for the express purpose of providing an automatable means of joining a slider to the suspension in one single operation.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide an electrode on a slider of Scheidecker et al. (US 5,734,523) that is on a surface other than the surface on which the magnetic head element is formed, as taught by Ainslie et al. (US 4,789,914). The rationale is as follows: one of ordinary skill in the art would have been motivated to provide an electrode on a slider of Scheidecker et al. (US 5,734,523) that is on a surface other than the surface on which the magnetic head element is formed, as taught by

Art Unit: 2754

Ainslie et al. (US 4,789,914), in order to, inter alia, provide an automatable means of joining a slider to the suspension in one single operation, as providing an automatable means of joining a slider to the suspension in one single operation as expressly taught and suggested by Ainslie et al. (US 4,789,914),

Response to Arguments

Applicant's arguments filed June 6, 2000 have been fully considered but they are not persuasive.

The Applicants allege that Scheidecker et al. (US 5,734,523) "fails to teach or suggest a magnetic head device including a magnetic head slider having a magnetic head element and a first electrode and a slider supporter having a second electrode that corresponds to the first electrode" (see Applicants' response, page 2, lines 20-22). The Applicants allege that Scheidecker et al. (US 5,734,523) "discloses the connection of a connector cable to a slider assembly using a z-axis adhesive, whereby the adhesive is integrated within the connector cable" (see Applicants' response, page 3, lines 6-8).

As set forth in the rejection, supra, the Examiner maintains that Scheidecker et al. (US 5,734,523) discloses a magnetic head device and a method of manufacturing the same, including a head slider with an MR magnetic head element, a first plurality of electrodes of the slider and a second plurality of electrodes of a supporter (e.g., see FIGS. 8 and 9), wherein the magnetic head slider is fixed to the slider supporter and the first electrode(s) of the slider are electrically connected to each other with an anisotropic conductive resin. (65, 66) (see also COL. 5, lines 42-45; COL. 5, lines 53-55; COL. 6, line 49; COL. 7, lines 46-48; and COL. 8, lines 14-16).

Art Unit: 2754

More particularly, the slider supporter (16 including the gimbal as depicted in FIG. 11), are integrated with the cable (18) in a known conventional manner (e.g., bonding), such that an slider supporter *having* a second electrode, or the second electrode *of* the supporter, is affixed to an electrode of the slider. The claims are completely lacking with respect to the particular details of the slider supporter with respect to the second electrode other than the mere recitation of the supporter "having" a second electrode or the second electrode "of" the supporter..

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

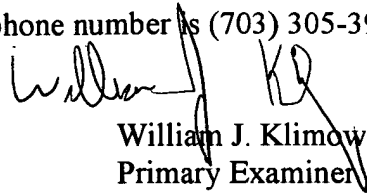
A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to William J. Klimowicz whose telephone number is (703) 305-3452. The examiner can normally be reached on M-F (6:30AM-5:00PM).

Art Unit: 2754

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stuart S. Levy can be reached on (703) 308-1295. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-9051 for regular communications and (703) 308-9051 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.


William J. Klimowicz
Primary Examiner
Art Unit 2754

WJK
July 30, 2000